

REMARKS

This responds to the non-final Office Action dated 7 August 2008. Claim 5 is canceled. Claims 1, 6, 7, 17, 21, 33, 38, 43, 50, 55, 60 and 61 are amended. Claims 6, 7 and 17 are amended to address formality issues only. The amendments to claims 1, 21, 33, 38, 43, 50, 55, 60 and 61 are supported by at least original claim 5, Figures 6A-6D and the description of those figures in the present application. No new matter has been added. Accordingly, claims 1-4 and 6-62 are presently pending in the application, each of which Applicant believes is in condition for allowance.

Claim Rejections - 35 U.S.C. § 112

The Examiner rejected claims 1-62 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement related to the term "wedge shaped." Applicant has amended the specification and drawings above to identify existing support in the figures of the present application for the term "wedge shaped." Withdrawal of the rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 103

In the Action, the Examiner rejected claims 1-41, 43-48, 55, 60 and 61 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,681,334 to Evans et al. in view of U.S. Patent No. 5,662,681 to Nash et al. and U.S. Patent No. 5,702,397 to Goble et al. Applicant respectfully traverses this rejection.

Independent claims 1, 21, 33, 38 and 43 as amended recite “wherein the wedge shaped portion of the locking mechanism includes a planar surface that is arranged to engage a planar inner surface of the housing.” Independent claim 55 as amended recites “wherein the wedge shaped portion of the locking device includes a planar surface that is arranged to engage a planar surface of the housing.” Independent claim 60 as amended recites “the wedge shaped locking element including a planar surface; the housing having at least one planar internal sidewall, the planar surface of the wedge shaped locking element being movable into and out of engagement with the planar internal sidewall.”

Evans is directed to an apparatus 20 used to apply a collagen 22 to inhibit the flow of blood through a percutaneous puncture 10. The apparatus includes a suture 24A-C, a washer or disk 46, a housing 26, and a tamping member 28 for placement of the collagen 22 at the puncture 10. The collagen 22 is expelled from the housing 26 with the tamping member 28 at the puncture 10. The collagen 22 can be held in place at the puncture 10 with the disk 46, wherein the sutures 24A, 24B are frictionally held in a passageway 48 of the disk 46. Evans fails to disclose or suggest a suture locking mechanism, in particular the claimed “wedge shaped portion” of a suture locking mechanism.

Nash discloses additional features of a closure device such as an anchor 32. However, Nash also fails to disclose or suggest a suture locking mechanism or a "wedge shaped portion" of a suture locking mechanism.

Goble is directed to a ligament bone anchor 100 (*see* FIGS. 18-20 of Goble) that is embedded in the bone structure of a person's leg (*see* FIGS. 6-9 of Goble). The anchor 100 includes a cylindrical body 101 that defines a longitudinal cavity 103. A rod 107 is mounted in a slot 108 in the cavity 103 to slide in a longitudinal direction. A suture 27 passes between the rod 107 and the inner surface of the cavity 103 and can be locked in place relative to the anchor 100 by contact with the rod 107. An outer surface of the rod 107 is scored at 107b in the form of grooving or serrations to improve friction with the suture 27.

The rejection contends that the scored feature 107b shown in FIG. 18 defines the claimed "wedged shaped portion" of a locking mechanism. The scored feature 107b includes a plurality of intersecting surfaces that form a plurality of grooves and peaks that are aligned perpendicular with the longitudinal axis of the cylindrical body 101. Those peaks arranged to contact the suture are facing the inner surface of the cavity 103. When the suture 27 is not interposed between the rod 107 and cavity 103, only the peaks of the scored feature 107b (not the portions of the scored feature 107b between the peaks and grooves) would contact the inner surface of the cavity 103. Those portions of the scored features 107b extending between the peaks and grooves are not even capable of contacting the inner surface of the cavity 103.

Thus, Goble fails to disclose or suggest “wherein the wedge shaped portion of the locking mechanism includes a planar surface that is arranged to engage a planar inner surface of the housing,” as required by claims 1, 21, 33, 38 and 43. Goble also fails to disclose or suggest “wherein the wedge shaped portion of the locking device includes a planar surface that is arranged to engage a planar surface of the housing,” as required by claim 55, or “the planar surface of the wedge shaped locking element being movable into and out of engagement with the planar internal sidewall,” as required by claim 60.

In view of the above, Applicant submits that Evans, Nash and Goble, alone or in combination, fail to disclose or render obvious every limitation of claims 1, 21, 33, 38, 43, 50, 55 and 60, and the claims that depend from them.

Claims 42, 49-52, 54, 56-59 and 62 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Evans in view of Nash and Goble and further in view of U.S. Patent No. 6,293,961 to Schwartz et al. Applicant respectfully traverses this rejection.

Claim 50 as amended recites “the inner housing assembly having a wedge shaped portion that defines at least one mating surface corresponding the at least one lower surface, wherein the at least one mating surface includes a planar portion that is arranged to engage a planar portion of the lower surface of the external housing.”

As discussed above, Evans fails to disclose or suggest a suture locking mechanism, in particular a wedge shaped portion of a locking mechanism. Nash, Goble and Schwartz, alone or in combination, fail to remedy the deficiencies of Evans as it relate to independent claims 38, 50, 55 and 60. The Examiner uses Nash merely for the disclosure of an anchor in a percutaneous puncture closure device. Goble is applied by the Examiner for its teaching of a cylinder 107 that

is rotatable within a longitudinal cavity 103 of a locking anchor 100. The scored feature 107b of the cylinder includes peaks and grooves, but does not include the planar surface/portion that meets the limitations of claims 38, 50, 55 and 60 for at least those reasons discussed above. Schwartz fails to remedy the deficiencies of Evans, Nash and Goble as it relates to the claimed suture locking mechanism. Therefore, the prior art of record fails to disclose or render obvious every limitation of independent claims 38, 50, 55 and 60, and claims 42, 49, 51, 52, 54, 56-59 and 62 which depend from them.

The Examiner rejected claim 53 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Evans in view of Nash, Goble and Schwartz, and further in view of U.S Patent No. 6,159,234 to Bonutti et al. Applicant respectfully traverses these rejections. Claim 50 is allowable over Evans in view of Nash, Goble and Schwartz for at least those reasons discussed above. Bonutti fails to remedy the deficiencies of Evans, Nash, Goble and Schwartz as they relate to claim 50. Therefore, claim 53 is allowable for at least the reason it is dependent upon an allowable base claim. Applicant does not otherwise concede the correctness of this rejection.

Accordingly, for each the above reasons, Applicant respectfully requests that the rejection of independent claims 1, 21, 33, 38, 43, 50, 55, and 60 under 35 U.S.C. § 103 be withdrawn, and these claims be allowed. Moreover, aside from the novel limitations recited therein, claims 2-4, 6-20, 22-32, 34-37, 39-42, 44-49, 51-54, 56-59, 61 and 62 are also allowable at least by virtue of their dependency upon allowable base claims 1, 21, 33, 38, 43, 50, 55, and 60.

Conclusion

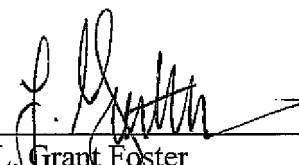
For at least the foregoing reasons, Applicant believes that each of the presently pending claims in this application is in immediate condition for allowance. Accordingly, Applicant respectfully requests a favorable action on the merits. If the Examiner has any further comments or suggestions, Applicant invites the Examiner to telephone the undersigned attorney to expedite the handling of this matter.

Applicant expressly disclaims all arguments, representations, and/or amendments presented or contained in any other patent or patent application, including any patents or patent applications claimed for priority purposes by the present application or any patents or patent applications that claim priority to this patent application. Moreover, all arguments, representations, and/or amendments presented or contained in the present patent application are only applicable to the present patent application and should not be considered when evaluating any other patent or patent application.

Respectfully submitted,

Dated: _____

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